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TRANSMITTAL FORM

(to be used for all correspondence after initial filing)

		Application Number	10/542,184
		Filing Date	(Intl.) January 20, 2004
		First Named Inventor	Alun DAVIES
		Art Unit	1646
		Examiner Name	Z. Howard
Total Number of Pages in This Submission	10 pages + 47 refs.	Attorney Docket Number	514712000800

ENCLOSURES (Check all that apply)

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SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT

Firm Name	MORRISON & FOERSTER LLP (Customer No. 25226)		
Signature			
Printed name	Jie Zhou		
Date	September 19 2006	Reg. No.	52,395

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Dated: 9-19-06 Signature: Rosemarie Pulje-Salmeron
(Rosemarie Pulje-Salmeron)

Patent
Docket No. 514712000800

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of:
Alun DAVIES et al.

Serial No.: 10/542,184

International Filing Date: January 20, 2004

For: METHODS OF SCREENING FOR
MODULATORS OF NERVE GROWTH
FACTOR

Examiner: Z. Howard

Group Art Unit: 1646

INFORMATION DISCLOSURE STATEMENT UNDER 37 C.F.R. § 1.97 & 1.98

MS Amendment
Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450

Dear Sir:

Pursuant to 37 C.F.R. §1.97 and § 1.98, Applicants submit for consideration in the above-identified application the documents listed on the attached Form PTO/SB/08a/b. Copies of foreign documents and non-patent literature are submitted herewith. The Examiner is requested to make these documents of record.

This Information Disclosure Statement is submitted:

- With the application; accordingly, no fee or separate requirements are required.
- Before the mailing of a first Office Action after the filing of a Request for Continued Examination under § 1.114. However, if applicable, a certification under 37 C.F.R. § 1.97 (e)(1) has been provided.

- Within three months of the application filing date or before mailing of a first Office Action on the merits; accordingly, no fee or separate requirements are required. However, if applicable, a certification under 37 C.F.R. § 1.97 (e)(1) has been provided.
- After receipt of a first Office Action on the merits but before mailing of a final Office Action or Notice of Allowance.
 - A fee is required. A check in the amount of __ is enclosed.
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 - A Certification under 37 C.F.R. § 1.97(e) is provided above and a Fee Transmittal form (PTO/SB/17) is attached to this submission in duplicate.

Applicants would appreciate the Examiner initialing and returning the Form PTO/SB/08a/b, indicating that the information has been considered and made of record herein.

The information contained in this Information Disclosure Statement under 37 C.F.R. § 1.97 and § 1.98 is not to be construed as a representation that: (i) a complete search has been made; (ii) additional information material to the examination of this application does not exist; (iii) the information, protocols, results and the like reported by third parties are accurate or enabling; or (iv) the above information constitutes prior art to the subject invention.

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Application Serial No. 10/542,184

Patent
Docket No. 514712000800

fees due in connection with the filing of this document to **Deposit Account No. 03-1952**
referencing 514712000800.

Dated: September 19, 2006

Respectfully submitted,

By Jie Zhou
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Substitute for form 1449/PTO				Complete if Known	
				Application Number	10/542,184
				Filing Date	(Intl.) January 20, 2004
				First Named Inventor	Alun DAVIES
				Art Unit	1646
				Examiner Name	Z. Howard
Sheet	1	of	3	Attorney Docket Number	514712000800

U.S. PATENT DOCUMENTS					
Examiner Initials*	Cite No. ¹	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code ² (if known)			
	1.	US-5,565,332-A	10-15-1996	Hoogenboom et al.	
	2.	US-5,580,717-A	12-03-1996	Dower et al.	
	3.	US-5,733,743-A	03-31-1998	Johnson et al.	
	4.	US-6,265,150-B1	07-24-2001	Terstappen et al.	

FOREIGN PATENT DOCUMENTS					
Examiner Initials*	Cite No. ¹	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
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NON PATENT LITERATURE DOCUMENTS					
Examiner Initials	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.			T ²
	5.	Armann, R. et al. (1995). "Intraplantar Injection of Nerve Growth Factor into the Rat Hind Paw: Local Edema and Effects on Thermal Nociceptive Threshold," <i>Pain</i> 64:323-329.			
	6.	Andreev, N.Y. et al. (1995). "Peripheral Administration of Nerve Growth Factor in the Adult Rat Produces a Thermal Hyperalgesia that Requires the Presence of Sympathetic Post-Ganglionic Neurones," <i>Pain</i> 63:109-115.			
	7.	Bischoff, S.C. et al. (May 15, 1992). "Effect of Nerve Growth Factor on the Release of Inflammatory Mediators by Mature Human Basophils," <i>Blood</i> 79(10):2662-2669.			
	8.	Bonini, S. et al. (October 1996). "Circulating Nerve Growth Factor Levels are Increased in Humans With Allergic Diseases and Asthma," <i>Proc. Natl. Acad. Sci. USA</i> 93:10955-10960.			
	9.	Bracci Laudiero, L. et al. (1992). "Multiple Sclerosis Patients Express Increased Levels of β -Nerve Growth Factor in Cerebrospinal Fluid," <i>Neurosci Lett</i> . 147:9-12.			
	10.	Bracci-Laudiero, L. et al. (May 1993). "Increased Levels of NGF in Sera of Systemic Lupus Erythematosus Patients," <i>Neuroreport</i> 4(5):563-565.			
	11.	Braun, A. et al. (1998). "Role of Nerve Growth Factor in a Mouse Model of Allergic Airway Inflammation and Asthma," <i>Eur. J. Immunol.</i> 28:3240-3251.			
	12.	Broude, N.E. et al. (June 2002). "Stem-loop Oligonucleotides: A Robust Tool for Molecular Biology and Biotechnology," <i>Trends in Biotechnology</i> 20(6):249-256.			
	13.	Carroll, S.L. et al. (October 1992). "Dorsal Root Ganglion Neurons Expressing trk Are Selectively Sensitive to NGF Deprivation In Utero," <i>Neuron</i> 9(4):779-788.			
	14.	Chao, M.V. et al. (April 1986). "Gene Transfer and Molecular Cloning of the Human NGF Receptor," <i>Science</i> 232:518-521.			
	15.	Crowley, C. et al. (March 25, 1994). "Mice Lacking Nerve Growth Factor Display Perinatal Loss of Sensory and Sympathetic Neurons yet Develop Basal Forebrain Cholinergic Neurons," <i>Cell</i> 76:1001-1011.			
	16.	Davies, A.M. et al. (November 1993). "Neurotrophin-4/5 Is a Mammalian-Specific Survival Factor for Distinct Populations of Sensory Neurons," <i>The Journal of Neuroscience</i> 13(11):4961-4967.			

Examiner Signature	Date Considered
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Substitute for form 1449/PTO				<i>Complete if Known</i>	
				Application Number	10/542,184
				Filing Date	(Intl.) January 20, 2004
				First Named Inventor	Alun DAVIES
				Art Unit	1646
				Examiner Name	Z. Howard
Sheet	2	of	3	Attorney Docket Number	514712000800

17.	Di Marco, E. et al. (October 25, 1993). "Nerve Growth Factor Binds to Normal Human Keratinocytes Through High and Low Affinity Receptors and Stimulates Their Growth by a Novel Autocrine Loop," <i>J. Biol. Chem.</i> 268(30):22838-22846.	
18.	DiStefano, P.S. et al. (May 1992). "The Neurotrophins BDNF, NT-3, and NGF Display Distinct Patterns of Retrograde Axonal Transport in Peripheral and Central Neurons," <i>Neuron</i> 8(5):983-993.	
19.	Dyck, P.J. et al. (1997). "Intradermal Recombinant Human Nerve Growth Factor Induces Pressure Allodynia and Lowered Heat-Pain Threshold in Humans," <i>Neurology</i> 48:501-505.	
20.	Falcini, F. et al. (1996). "Increased Circulating Nerve Growth Factor is Directly Correlated with Disease Activity in Juvenile Chronic Arthritis," <i>Ann. Rheum. Dis.</i> 55:745-748.	
21.	Hoover, J.E. et al. eds. (1975). <i>Remington's Pharmaceutical Sciences</i> , 15th Edition, Mack Publishing Co.: Easton, PA. (Table of Contents Only.)	
22.	Horigome, K. et al. (July 15, 1993). "Mediator Release from Mast Cells by Nerve Growth Factor," <i>J. Biol. Chem.</i> 268(20):14881-14887.	
23.	Indo, Y. (2001). "Molecular Basis of Congenital Insensitivity to Pain With Anhidrosis (CIPA): Mutations and Polymorphisms in TRKA (NTRK1) Gene Encoding the Receptor Tyrosine Kinase for Nerve Growth Factor," <i>Human Mutation</i> 18(6):462-471.	
24.	Leon, A. et al. (April 1994). "Mast Cells Synthesize, Store, and Release Nerve Growth Factor," <i>Proc. Natl. Acad. Sci. USA</i> 91:3739-3743.	
25.	Levison, P.R. et al. (August 7, 1998). "Recent Developments of Magnetic Beads for Use in Nucleic Acid Purification," <i>J. Chromatogr. A</i> 816(1):107-111.	
26.	Lindsay, R.M. (July 1988). "Nerve Growth Factors (NGF, BDNF) Enhance Axonal Regeneration But Are Not Required for Survival of Adult Sensory Neurons," <i>J. Neurosci.</i> 8(7):2394-2405.	
27.	Lindsay, R.M. et al. (January 26, 1989). "Nerve Growth Factor Regulates Expression of Neuropeptide Genes in Adult Sensory Neurons," <i>Nature</i> 337:362-364.	
28.	Matsuda, H. et al. (September 1988). "Nerve Growth Factor Promotes Human Hemopoietic Colony Growth and Differentiation," <i>Proc. Natl. Acad. Sci. USA</i> 85:6508-6512.	
29.	McCafferty, J. et al. (December 6, 1990). "Phage Antibodies: Filamentous Phage Displaying Antibody Variable Domains," <i>Nature</i> 348:552-553.	
30.	McMahon, S.B. et al. (May 1994). "Expression and Coexpression of Trk Receptors in Subpopulations of Adult Primary Sensory Neurons Projecting to Identified Peripheral Targets," <i>Neuron</i> 12:1161-1171.	
31.	Miura, Y. et al. (January 2000). "Mutation and Polymorphism Analysis of the TRKA (NTRK1) Gene Encoding a High-Affinity Receptor for Nerve Growth Factor in Congenital Insensitivity to Pain with Anhidrosis (CIPA) Families," <i>Human Genetics</i> 106(1):116-124.	
32.	Mu, X. et al. (September 1993). "Neurotrophin Receptor Genes Are Expressed in Distinct Patterns in Developing Dorsal Root Ganglia," <i>J. Neuroscience</i> 13(9):4029-4041.	
33.	Otten, U. et al. (1985). "Nerve Growth Factor Induces Plasma Extravasation in Rat Skin," <i>Eur. J. Pharmacol.</i> 106:199-201.	
34.	Otten, U. et al. (December 1989). "Nerve Growth Factor Induces Growth and Differentiation of Human B Lymphocytes," <i>Proc. Natl. Acad. Sci. USA</i> 86:10059-10063.	
35.	Pearce, F.L. et al. (1986). "Some Characteristics of Histamine Secretion From Rat Peritoneal Mast Cells Stimulated with Nerve Growth Factor," <i>J. Physiol.</i> 372:379-393.	
36.	Petty, B.G. et al. (1994). "The Effect of Systemically Administered Recombinant Human Nerve Growth Factor in Healthy Human Subjects," <i>Annals Neurol.</i> 36:244-246.	
37.	Pezet, S. et al. (July 1, 1999). "Chronic Pain is Associated with Increased TrkA Immunoreactivity in Spinoreticular Neurons," <i>J. Neurosci.</i> 19(13):5482-5492.	
38.	Raychaudhuri, S.P. et al. (1998). "Psoriatic Keratinocytes Express High Levels of Nerve Growth Factor," <i>Acta Derm Venereol.</i> 78:84-86.	
39.	Richardson, P.M. et al. (July 1984). "Uptake of Nerve Growth Factor Along Peripheral and Spinal Axons of Primary Sensory Neurons," <i>J. Neurosci.</i> 4(7):1683-1689.	

Examiner Signature	Date Considered
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Sheet	3	of	3	Attorney Docket Number	514712000800

40.	Richardson, P.M. et al. (October 1986). "The Induction of a Regenerative Propensity in Sensory Neurons Following Peripheral Axonal Injury," <i>J. Neurocyt.</i> 15(5):585-594.	
41.	Smyene, R.J. et al. (March 17, 1994). "Severe Sensory and Sympathetic Neuropathies in Mice Carrying a Disrupted Trk/NGF Receptor Gene," <i>Nature</i> 368:246-249.	
42.	Torcia, M. et al. (May 3, 1996). "Nerve Growth Factor Is an Autocrine Survival Factor for Memory B Lymphocytes," <i>Cell</i> 85:345-356.	
43.	Tyagi, S. et al. (January 1998). "Multicolor Molecular Beacons for Allele Discrimination," <i>Nature Biotechnology</i> 16:49-53.	
44.	Ueyama, T. et al. (1993). "Production of Nerve Growth Factor by Cultured Vascular Smooth Muscle Cells From Spontaneously Hypertensive and Wistar-Kyoto Rats," <i>J. Hypertens.</i> 11:1061-1065.	
45.	Verge, V.M.K. et al. (March 1989). "Nerve Growth Factor Receptors on Normal and Injured Sensory Neurons," <i>J. Neurosci.</i> 9(3):914-922.	
46.	Verge, V.M.K. et al. (October 1989). "Histochemical Characterization of Sensory Neurons with High-Affinity Receptors for Nerve Growth Factor," <i>J. Neurocyt.</i> 18(5):583-591.	
47.	Verge, V.M.K. et al. (June 1990). "Influence of Nerve Growth Factor on Neurofilament Gene Expression in Mature Primary Sensory Neurons," <i>J. Neurosci.</i> 10(6):2018-2025.	
48.	Verge, V.M.K. et al. (October 1992). "Colocalization of NGF Binding Sites, trk mRNA, and Low-Affinity NGF Receptor mRNA in Primary Sensory Neurons: Responses to Injury and Infusion of NGF," <i>J. Neurosci.</i> 12(10):4011-4022.	
49.	Winter, G. et al. (1994). "Making Antibodies by Phage Display Technology," <i>Annu. Rev. Immunol.</i> 12:433-455.	
50.	Wittwer, C.T. et al. (December 2001). "Real-Time Multiplex PCR Assays," <i>Methods</i> 25(4):430-442.	
51.	Wright, D.E. et al. (January 16, 1995). "Neurotrophin Receptor mRNA Expression Defines Distinct Populations of Neurons in Rat Dorsal Root Ganglia," <i>J. Comp. Neurol.</i> 351(3):329-338.	

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

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